OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	260003097
Drinking-Water System Name:	Vaughan Distribution System
Drinking-Water System Owner:	The Corporation of the City of Vaughan
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2018 – December 31, 2018

Complete if your Category is Large Municipal Residential or Small Municipal Residential	<u>Complete for all other Categories.</u>
Does your Drinking-Water System serve more than 10,000 people? Yes [x] No []	Number of Designated Facilities served:
Is your annual report available to the public at no charge on a web site on the Internet? Yes [x] No []	Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []
Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.	Number of Interested Authorities you report to: N/A
http://www.vaughan.ca/services/resident ial/water/water_quality/Pages/default.as px	Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number			
N/A				

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?

Yes [] No []

Indicate how you notified system users that your annual report is available, and is free of charge.

- [x] Public access/notice via the web
- [] Public access/notice via Government Office
- [] Public access/notice via a newspaper
- [] Public access/notice via Public Request
- [] Public access/notice via a Public Library
- [] Public access/notice via other method _

Describe your Drinking-Water System

The Vaughan Distribution System is a stand-alone drinking water distribution system. The system receives treated water from York Region. The Region purchases treated drinking water from the City of Toronto and the Region of Peel.

List all water treatment chemicals used over this reporting period

N/A

Were any significant expenses incurred to?

- [] Install required equipment
- [] Repair required equipment
- [] Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

Watermain replacement – \$7,124,479

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
02/26/18	Total Coliform	TC – P	P-A/100mL	Flush and resample	03/01/18
03/22/18	Chlorine Residual	Combined= 0.00	mg/L	Flush and resample	03/24/18
03/24/18	Lead	0.0298	mg/L	Flush and resample	04/05/18
03/26/18	Total Coliform	TC – P	P-A/100mL	Flush and resample	04/08/18
03/30/18	Total Coliform (Resample)	TC – P	P-A/100mL	Flush and resample	04/08/18

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
04/02/18	Total Coliform (Resample)	TC – P	P-A/100mL	Flush and resample	04/08/18
04/04/18	Total Coliform (Resample)	TC – P	P-A/100mL	Flush and resample	04/08/18
04/06/18	Total Coliform (Resample)	TC – 16	Count/100 mL	Flush and resample	04/08/18
04/06/18	Total Coliform (Resample)	TC – P	P-A/100mL	Flush and resample	04/08/18
04/13/18	Total Coliform	TC – 7	Count/100 mL	Flush and resample	04/14/18
04/13/18	Total Coliform	TC – 2	Count/100 mL	Flush and resample	04/15/18
05/04/18	Total Coliform	TC – 300	Count/100 mL	Flush and resample	05/04/18
05/14/18	Total Coliform	TC – 1	Count/100 mL	Flush and resample	05/14/18
05/18/18	Chlorine Residual	Combined= 0.06	mg/L	Flush and resample	05/19/18
05/18/18	Total Coliform	TC – P	P-A/100mL	Flush and resample	05/19/18
05/18/18	Chlorine Residual	Combined= 0.01	mg/L	Flush and resample	05/19/18
06/20/18	Total Coliform	TC – P	P-A/100mL	Flush and resample	06/25/18
06/22/18	Total Coliform (Resample)	TC – P	P-A/100mL	Flush and resample	06/25/18
06/25/18	NDOGN	NDOGN	Count/100 mL	Flush and resample	06/30/18
06/27/18	Total Coliform (Resample)	TC – 1	Count/100 mL	Flush and resample	06/30/18
06/29/18	Total Coliform (Resample)	TC – 17	Count/100 mL	Flush and resample	06/30/18
06/29/18	Total Coliform (Resample)	TC - 1	Count/100 mL	Flush and resample	06/30/18
07/13/18	Total Coliform	TC – P	P-A/100mL	Flush and resample	07/14/18
08/02/18	Total Coliform	TC – 8	Count/100 mL	Flush and resample	08/06/18

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
09/14/18	Chlorine Residual	Combined= 0.01	mg/L	Flush and resample	09/14/18
10/11/18	Chlorine Residual	Combined= 0.04	mg/L	Flush and resample	10/11/18
10/26/18	Chlorine Residual	Combined= 0.04	mg/L	Flush and resample	10/26/18
11/04/18	Total Coliform	TC – 22	Count/100 mL	Flush and resample	11/06/18
11/16/18	Total Coliform	TC – P	P-A/100mL	Flush and resample	11/18/18

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw					
Treated					
Distribution	1,999	A – A	A – 300	1,001	<1 CFU/mL –
		MPN/100mL	MPN/100mL		2,600 CFU/mL

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

period covered by	y mis minual hepot a		
	Number of Grab Samples	Range of Results (min #) - (max #)	
Turbidity	1	0.20 NTU	
Chlorine	2,333	Combined- 0.00 – 2.16	
Fluoride (If the DWS provides fluoridation)	1	0.64	

NOTE: Record the unit of measure if it is **not** milligrams per litre.

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	10/10/2018	0.001	mg/L	No
Arsenic	10/10/2018	0.0009	mg/L	No
Barium				
Boron				
Cadmium	10/10/2018	<0.0005	mg/L	No
Chromium	10/10/2018	<0.0005	mg/L	No
*Lead				
Mercury				
Selenium	10/10/2018	<0.0005	mg/L	No
Sodium	10/10/2018	14.9	mg/L	No
Uranium				
Fluoride	10/10/2018	0.64	mg/L	No
Nitrite	10/10/2018	<0.05	mg/L	No
Nitrate	10/10/2018	<0.5	mg/L	No

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

*only for drinking water systems testing under Schedule 15.2; this includes large municipal nonresidential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Summary of lead testing under Schedule 15.1 during this reporting period

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing			
Distribution	20	<0.0005 - 0.0298	1

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metobolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				

Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) +				
metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene				
(vinylidene chloride)				
Dichloromethane				
2-4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
ТНМ	4/year	19.4	μg/L	No
(NOTE: show latest annual average)				
Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				

Trichloroethylene		
2,4,6-Trichlorophenol		
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)		
Trifluralin		
Vinyl Chloride		

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample	
N/A				